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"SOME EMERGING ISSUES IN EMERGENCY MANAGEMENT"

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ABSTRACT

This Monograph examines several emerging policy issues in emergency management and their relationship to present and future national policy. Examined are: (1) the influence of personal biases and experiences on the derivation of individual assumptions which serve to structure our perceptions concerning how emergency management issues should or should not be prioritized; (2) six national trends that could have some future impact on emergency management policy; (3) the stake holders in emergency management (e.g. constituents) who collectively surface important, yet different, candidate policy issues which must be considered during the policy formulation process; and, (4) a "temporal" framework for use in identifying, analyzing and prioritizing common policy issues related to emergency management that cut across a broad spectrum of disaster agents.

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PREFACE

Identifying, analyzing, and prioritizing policy issues in emergency management is not an easy task. The formulation of effective national policies in emergency management requires not only a clear understanding of emerging issues but also an understanding of the influence of shifting present and future national trends and their long- or short-term impacts.

Personal biases and experiences of policy-makers and constituents within the emergency management profession and the identification of policy issues that cut across a broad spectrum of disaster agents must be considered as integral components of any decisions leading to the formulation of national policies related to emergency management. The prioritization of policy issues in emergency management requires that policy-makers recognize that although disparities among policy issues do exist, the adoption of problem-solving strategies drawn from social science research could prove to be useful tools in analyzing and categorizing policy issues from a national perspective.

This monograph proposes a general framework for analyzing four major disaster phases, e.g., preparedness, response, recovery, and mitigation and uses a "temporal" framework for identifying and analyzing nine candidate emerging issues in emergency management from a national perspective. Addressed are issues surrounding: (a) the absence of an integrated disaster-loss data base; (b) training and certification of emergency management professionals; (c) funding for integrated community warning systems; (d) legal issues at the State and local level(s); (e) Good Samaritan legislation; (f) mental health needs of first responders; (g) post-event mitigation efforts; (h) nuclear war as a planning problem; and, (i) all-hazard insurance.

SOME EMERGING ISSUES IN EMERGENCY MANAGEMENT

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INTRODUCTION

Attempting to identify emerging issues in emergency management has proven to be a formidable task. As you read this monograph, you may get a sense of how elusive some issues can be, and how widely individual views of the importance of particular issues can vary. One might easily have titled this paper "Submerged Issues in Emergency Management," for it is certain that not everyone who reads this monograph will view the issues identified as deserving further study.

All of us have a limited range of experiences. Likewise, we all have a very selective set of biases within which we interpret these experiences and twist them so as to validate our viewpoint. We use these biases to structure what we perceive about reality and those aspects of reality that we define as good. Following the course charted to reach a list of emerging policy issues, you are encouraged to question not only the assumptions made, but also the range of assumptions which structure your own priorities.

Taking this point one step further, it is suggested that if one looks at the spectrum of current hazards, and reviews frequency data for the entire nation, it would appear that the United States of America is a pretty frightening place to live. Being from a mountain state, with a small population base, and not being a Federal official, this view of reality does not concur with the author's experience. Nor is it believed to be consistent with what most lay people perceive.

Peter Rossi et al. (1982) penetrated this matter a bit and referred to it as a "relativity of levels." That is, when disasters are viewed from a national perspective, they have a rather different ring than when viewed from the standpoint of a single county or local municipality. In short, our perception of the relative importance of a particular hazard and the desirability of various forms of mitigation are not necessarily the same as those found among people rooted within local governmental structures.

There are four additional points emphasized throughout this monograph:

- First, continuing with the theme regarding bias and basic assumptions, I suggest that any serious examination of emergency management has to be placed within the context of national trends. Indeed, the very way we view candidate issues pertaining to emergency management may be highly reflective of our sense of these trends. Thus, to get you thinking about this, a series of relevant plans are proposed.

- Second, a framework is offered that incorporates the theme of pluralism. In this regard we need to ask: "Who are the principals?" Some of us see only disaster victims while others see only a cadre of technical specialists like hydrologists, soil experts, or floodplain managers. A range of constituent parties--the "stake holders" in emergency management--will be identified. A key assumption is that candidate issues take important convolutions as we cut across these groups.
- Third, consideration of what is termed "temporal" interpretation is urged. The term "temporal" means looking at disaster phases as an alternative to focusing on the event of causative agent. The Integrated Emergency Management System (IEMS) concept has its origins within this temporal imagery.
- Fourth, and finally, these elements will be used to lay out a limited number of candidate issues. This array is intended to stimulate my readers to take a fresh and detailed look at the emerging issues in emergency management.

NATIONAL TRENDS

American society is relatively decentralized and pluralistic. Like any other social system, it continues to adapt and change. In part, these changes are constrained by a series of guiding principles that some have given their life to maintain. But there are stimuli, too--both internal and external. To illustrate this point, my readers are encouraged to engage in a simple exercise. Taking the last decade as a time-line and projecting an equal distance into the future, make a list of some probable anticipations.

Drawing upon your knowledge of today's emerging national trends, what shifts are occurring that have special relevance to emergency management? Assuming that we attempted to complete this exercise on an individual rather than a collective basis, it could be postulated that none of us would produce an identical list. More emphatically, the obvious disparities between your list and mine will say much about our respective assumptions. Thus, our views of emergency management policy may differ considerably--a key contributor being our perceptions of national trends.

Figure 1 depicts six shifting national trends that will have some future impact on emergency management. The discussion that follows proposes these shifts.

1. SHIFT FROM FEDERAL FOCUS TO STATE AND LOCAL GOVERNMENTS
2. SHIFT IN DEMOGRAPHICS
3. SHIFT IN DEFINITIONS OF CASUALTY AND NEGLIGENCE
4. SHIFT TO MULTI- OR INTEGRATED-HAZARD MANAGEMENT
5. SHIFT FROM STRUCTURAL MITIGATION TO EXPERIMENTS WITH NONSTRUCTURAL MITIGATION STRATEGIES
6. SHIFT IN PROFESSIONAL EXPECTATIONS

Figure 1. Shifting National Trends

1. Shift From A Federal Focus to State and Local Governments

We may refer to this trend as "the new federalism," or assign some other label, but we must acknowledge that the recent past has curbed the long-term growth of a Federal presence at the State and local level(s). State and local governments are not equipped to fill many voids that recent Federal program cuts have created.

On the other hand, there has been an increase in the quality of expertise found at the State and local level(s). Whether we believe that there are now opportunities for improving the nation's disaster and hazard management capability because of this shifting is not the issue. The point to be emphasized is that we have a different situation today than that which existed a decade ago. Emergency management has not been exempt from this national restructuring.

2. Shift In Demographics

Issues in emergency management must be couched within a recognition of several relatively invisible population movements.

We are experiencing a graying of the sun belt. The nation's elderly are clustering in increased numbers into areas that have never experienced such concentrated human settlements. Some of these areas are flood-prone and others will be demolished by hurricanes before the end of the 1980's. Many of the nation's elderly are building retirement homes in canyons from which some day their flood ravaged bodies will be pulled.

Noticeable increases in mobile home sales clearly reveal that an increased number of Americans prefer this type of housing. Anyone who has seen the aftermath of a mobile home park that had been struck by a tornado would understand why this is an area of grave concern. Simple tie-down requirements do not exist in many regions. Do we have even an estimate of the number of people who reside in such dwellings who have operative warning systems and access to nearby underground shelters? The number of Americans at risk from those dancing funnels of death such as that which decimated a major portion of Wichita Falls, Texas, in April of 1979, is increasing daily.

However, no one has a good fix on the national scene when a multihazard perspective is used.

3. Shift In Definitions Of Casualty And Negligence

Since the publication of Margerun's report (1979) on potential liability issues associated with earthquake losses, the issue of liability has become a matter of concern for many emergency management professionals. Examination of the chronology of events following the famous Buffalo Creek flood in West Virginia in 1972 helped to clarify the issues as evidenced in the works of Rabin (1978) and Stern (1976). However, as Thomas (1983) has so clearly revealed, there are many matters in this area that merit our attention. Likewise, there are many consequences for local governments and emergency management specialists that merit further study.

4. Shift To Multi- Or Integrated Hazard Management

The Integrated Emergency Management System (IEMS) concept does not deny a civil defense component. Although complex, the concept holds much promise. There are, however, important problems surrounding its implementation that remain unresolved. A key problem with the concept is that it affords a posture of integration and leanness in an era when both are essential. The manner in which IEMS will be implemented over the next decade will effect the nation's security, as well as the lives of those at risk today because of choices made regarding where to build a house.

5. Shift From Structural Mitigation To Experiments With Non-Structural Approaches

Measuring and assessing the magnitude of flood-caused damage is fundamental to a wide range of planning options entailing either non-structural or structural alternatives. In selecting appropriate mitigation strategies, we must adopt strategies that incorporate a balanced mix of both structural and non-structural alternatives. The zealous dam building of the past has run its course. No longer can flooding be viewed as "bad"--to be eliminated through the adoption of a single-minded approach. There simply is not enough concrete!

Those who have argued for years that flooding is a natural phenomenon with important consequences, are making their impact. The National Flood Insurance Program (NFIP) of the Federal Emergency Management Agency (FEMA) is a critical experiment.

The NFIP illustrates an emerging philosophy that has recast the question of flood prevention. Rather than continue with the basic flood-mitigation approaches of dam builders, new experimental approaches based upon new assumptions must be adopted. Today, key questions surrounding flood mitigation have taken on new dimensions. We now must ask: "What is the most efficient use of flood-prone lands?"

This recasting has very significant implications for emergency management. The perspective it implies for our approach to flooding has its parallels in all other disaster agents. Our answers lie in a range of options--each of which must reflect a balancing of costs and benefits as they are perceived by a variety of interest groups. Because of their differing value sets--values that guide their rankings of tradeoffs--different groups will have conflicting definitions of the "appropriate balance" among adjustment options. This view contrasts sharply with an "engineering mentality" that presumes that "correct decisions" can be identified through applications of the "right" scientific methodology. Value differences among interest groups are real, furthermore, they may be explained, but not resolved, by the methods of science.

6. Shift In Professional Expectations

Today's emergency manager is not like that of yesterday! There is a silent revolution occurring in local communities across the nation. No longer are emergency management positions the exclusive territory of retired military officers.

Of greater importance than the shifts in age and sex distributions among those holding positions in the emergency management field is the matter of professionalism. Today a new group of emergency management professionals is emerging. The next decade will bring increased evidence of this phenomenon. As with the emergence of a professional ethic among other occupational groups, this rising force will bring new levels of expertise, and important political pressures, into the emergency management arena.

How does your list of national trends relevant to emergency management compare to mine? Where are our basic assumptions different?

CONSTITUENT PARTIES

Who are the "stake holders" in emergency management? This monograph suggests that there are many. It further suggests that any analysis of emergency management policy issues requires a clear understanding of this diversity. Figure 2 depicts major constituent parties who, when viewed collectively within the context of emergency management, surface important candidate issues as we cut across these groups.

Referring to Figure 2 as a point of departure, there are three major classes of stake holders: (a) victims; (b) helpers; and, (c) funders. The discussion that follows provides an overview of the relative complexities of each referent group and identifies important differences among these groups relative to how they view emergency management policy issues.

1. Victims

Disaster victims are the clients. Victims may be individuals or family groups. However, those hurt or whose homes are demolished, are but the tip of the iceberg. While their needs must be given priority, the shock of disaster extends beyond these victim types. Research of the past decade has provided an understanding of "secondary" victims, such as the wives of miners trapped in underground tombs, or the parents of children killed on a school bus. Such individuals are an important, but still all too often unrecognized constituency.

Juxtaposed with these two victim types are organizations. Rip-ped up roads, damaged sewage plants, and demolished school buildings are typical ways in which local government and private sector organizations feel the impact of disaster.

Meeting the needs of these organizations, clients must be placed within the context of relieving the suffering experienced by individuals and their families. Policies developed for one have an obvious interdependence for the other.

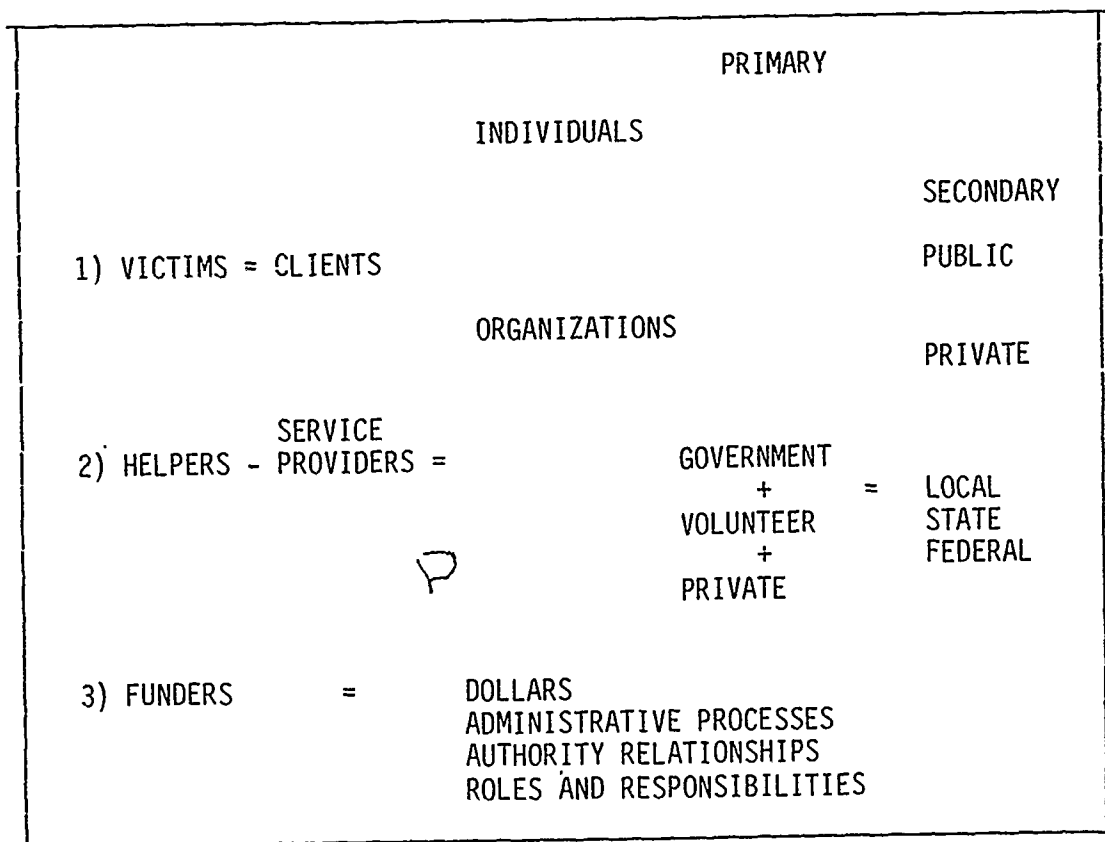


Figure 2. The Stake Holders In Emergency Management

2. Helpers

The cadre of service providers come from a cross section of both government and private sector organizations. Voluntary organizations are an integral part of the nation's capability to respond to emergencies.

Each agency at the scene of a disaster has a telephone line radiating upward to State, regional, and national offices. Resources are deployed through these channels. Similar to the diversity that characterizes the victim population, the service provider network is complex, fragmented, and all too often, poorly coordinated. This network, however, represents a powerful series of constituencies whose interpretations of emergency management policy issues differ significantly.

3. Funders

Potential sources for dollars are numerous. The scenario changes when one goes seeking them. There is no agreed upon formula as to who should fund what. Moreover, many effective managers will seek to use a disaster to enhance the financial resource base of their local unit. Thus, the competitive jockeying that characterizes inter-governmental relations does not disappear because of a disaster. Only the opportunities and tokens of victory change--not the fundamental processes. There are a host of emergency management policy issues that focus on both the availability and accessibility of funding.

Administrative processes, authority relationships, and definitions of roles and responsibilities, constitute the core of the management system. Related issues, to name a few, range from those associated with the licensing of a public utility seeking to augment its service capability by constructing a nuclear power plant to those associated with determining who is in charge when a mountain blows up. Remember Mount St. Helens?

The limits of authority among those comprising the emergency management network reflect ambiguities that must be resolved if improved response effectiveness is to occur. This is even more true for selected facets of the government-private sector interaction. Probably most critical is the relationship between media organizations and the emergency response network.

This single relationship contains a host of important issues that require serious consideration and penetrating analysis.

To summarize, there are many constituent parties who have a stake in how various emergency management issues get resolved. Failure to seek input from

those who may be affected by subsequent decisions--even decisions regarding issues specification--will, at best, preclude a complete understanding of the policy issues and may even generate organized resistance.

DISASTER PHASES

Sociologists have found it helpful to approach disaster response from a "temporal perspective," e.g. separating a disaster into several stages. In addition to dividing issues across dimensions of disaster agents, as for example, tornadoes versus toxic chemical spills versus nuclear power plant licensing, this temporal approach also provides a framework for identifying common issues that cut across a broad spectrum of specific disaster agents. Also, it provides a framework for raising substantive questions as: "What is missing in the analysis of the problem/issue?" Furthermore, it provides a general framework for raising more intuitive questions as: "What relative focus or priority might be best?"

Borrowing from nomenclature proposed by the National Governors' Association, Figure 3 proposes a general framework for analyzing four major disaster phases: (a) preparedness, (b) response, (c) recovery, and (d) mitigation. Each of these general disaster phases can be further subdivided into two specific subprocesses. This yields the following eight categories:

- (1) Planning;
- (2) Warning;
- (3) Mobilization/Evacuation;
- (4) Emergency Response;
- (5) Restoration;
- (6) Reconstruction;
- (7) Hazard Perceptions; and
- (8) Adjustments--Both Structural and Non-structural.

There are important policy issues associated with the aforementioned array of categories. Although these policy issues vary by their relative location within a temporal-based classification scheme, they vary in two other ways:

1. By level-of-abstraction; and,
2. By time-horizon.

GENERAL	SPECIFIC	POLICY ISSUES
PREPAREDNESS	PLANNING	?
	WARNING	?
RESPONSE	MOBILIZATION/ EVACUATION	?
	EMERGENCY RESPONSE	?
RECOVERY	RESTORATION	?
	RECONSTRUCTION	?
MITIGATION	HAZARD PERCEPTIONS	?
	ADJUSTMENTS STRUCTURAL AND NONSTRUCTURAL	?

Figure 3. General Framework For Analyzing Disaster Phases

Issues related to "turf" are important, but are at a different level-of-abstraction than some of the technologically-related policy issues such as those associated with the use of fast-acting sprinkler heads. For purposes of further analysis, it has frequently proven useful to combine three or four issues into a single, more abstract, theme.

Time-horizon issues are more complex. That is, some issues have existed for quite some time, while other issues have only recently begun to surface. Although recognition of the existence of these variations is critical, at best, some issues should remain ignored--especially in those instances where their resolution has been pending for years.

Before addressing the candidate listing of policy issues developed by the author of this monograph, one last point merits consideration. Given the obvious disparities among the policy issues identified in the previous discussion, a key question that should be addressed is: "What criteria might be used to rank these issues in order of their importance?" Petak and Atkisson (1982) provided a helpful approach. As we rate the key issues, the following four questions must be kept in mind:

1. How many people or how much area is adversely affected?
2. How intensely are these people and areas being affected?
3. Will the problem situation get better or worse if nothing is done?
4. Is the greatest gain to be derived from dealing with existing exposures or from preventing future ones?

EMERGING CANDIDATE POLICY ISSUES

Using Figure 3 as a point of reference, eight specific subprocesses were identified as being functionally and integrally related to the four general disaster phases previously addressed in this monograph.

Figure 4 identifies nine candidate policy issues associated with the subprocesses addressed in Figure 3.

Each policy issue merits debate and analysis. The assessment that follows addresses each policy issue identified in Figure 4 with consideration given to differing abstraction levels and time-horizons.

DISASTER PHASES	POLICY ISSUES
PLANNING	INTEGRATED DISASTER LOSS DATA BASE
	TRAINING FOR AND CERTI- FICATION OF EMERGENCY MANAGERS
WARNING	FUNDING FOR INTEGRATED COMMUNITY WARNING SYSTEMS
MOBILIZATION/EVACUATION	LIABILITY FOR EVACUATION
EMERGENCY RESPONSE	GOOD SAMARITAN LEGISLATION
RESTORATION	MENTAL HEALTH NEEDS OF FIRST RESPONDERS
RECONSTRUCTION	POST-EVENT MITIGATION EFFORTS
HAZARD PERCEPTIONS	NUCLEAR WAR A PLANNING PROBLEM (IMPACTS ON STATE AND LOCAL PROGRAMS)
ADJUSTMENTS	FROM FLOOD TO ALL-HAZARD INSURANCE

Figure 4. Emerging Candidate Policy Issues

1. Integrated Disaster-Loss Data Base

Some might choose to either dismiss this issue or perceive it narrowly as a research-related issue. However, in the real world, an adequate integrated disaster-loss data base does not exist. The absence of such a data base makes it virtually impossible to accurately assess the extent of annual losses resulting from the broad spectrum of disasters that have occurred in American communities. Although floods represent the most frequent type of disasters within this country and appear to result in the largest outlay of dollars due to the extensive damage they create--here again, the flood-related disaster-loss data is inadequate. Several reports on flood mitigation published by the National Science Foundation (1980), Changnon et al. (1983) and Tubbesing (1979) corroborate this fact.

Until we have a better system for monitoring dollar losses and better strategies for estimating less obvious economic costs and indicators on the human side of the equation, one cannot expect much progress in providing more accurate determinations of disaster-related dollar losses in this country. There are many competing special interest groups whose data document their perceived needs. To effectively and efficiently assess the validity of such presumptions, emergency managers are desperately in need of better planning and disaster-loss assessment strategies than those which presently exist.

Many agencies collect data that presumably meet their needs. However, a comprehensive disaster incident reporting system would permit an examination of the role of emergency management that is not possible today. Furthermore, in much the same way that Changnon's (1980) flood and drought data benefited the State of Illinois, such a data base could provide an important basis for decision-making. Among the many policy matters to be addressed, beyond the design of such a system, are matters of agency roles and potential contributions.

This candidate issue illustrates two previously addressed variables--abstraction and time window. In addition to being very concrete and rather narrow, this issue has been raised with increasing frequency during the past few years.

Presumably, many emergency management agencies collect data that meet their needs. A comprehensive disaster incident reporting system would contribute to the enhancement of the role of emergency management that heretofore has not been possible. In much

the same way that flood and drought data collected by Chagnon (1980) benefited the State of Illinois, the establishment of an integrated disaster-loss data base would provide a more credible information source upon which key decisions could be made. Notwithstanding those issues surrounding the design of a comprehensive disaster information storage and retrieval system, among the other policy issues to be addressed are those related to agency roles and potential contributions.

2. Training And Certification Of Emergency Management

Expanding on the theme of professionalism in the field of emergency management, this is another rather narrow issue, but one that is much broader than the disaster data base issue. Through professional organizations as the National Coordinating Council on Emergency Management (NCCEM-formerly the United States Civil Defense Council - USCDC), the National Emergency Management Association (NEMA) and others, this issue is being addressed today. However, the network of groups--the stake holders--should be providing more input.

This statement is not to be misinterpreted as advocating the adoption of a standardized national emergency management curriculum that would be rigidly enforced, although admittedly, there are limited types of skill areas wherein such an approach might be appropriate. But as behavioral research documents, e.g., Dynes et al. (1977) and Drabek et al. (1981), the pluralism of the nation requires a multipronged approach to training and certifying emergency management professionals. The very job requirements or functional responsibilities that are associated with the term "emergency manager" do vary across the nation, as do the web of organizational matrixes in which people try to carry out associated tasks, (Hoetmer,1983). In many rural counties, volunteer or part-time positions are held by persons who have minimal contact with their counterparts--even in other regions of their State. However, as the American Red Cross has demonstrated so well for decades, volunteerism does not negate professionalism.

The point to be emphasized is that we know much more than is being applied in the field. Research from a wide variety of disciplines has expanded our knowledge base regarding many aspects of emergency management. Substantial progress has been made, but a comprehensive and broadly based review is needed by representatives from a larger cadre of interest groups, e.g. local directors involved in training committees of professional associations like the NCCEM or the National

Association for Search and Rescue; volunteer organizations such as the American Red Cross, the Salvation Army, Interfaith, and others; representatives from State agencies and their professional counterparts such as NEMA and the Association of State Floodplain Managers; other Federal agencies in addition to FEMA having emergency management responsibilities; and, a good cross section of colleges and universities throughout the nation. There are a variety of different educational needs and issues that require sorting so that proposals for alternative courses of action can be advanced.

3. Funding For Integrated Community Warning Systems

What should be the relative distribution of funds provided by Federal, State, and local sources for the implementation of integrated warning systems? Integrated warning systems are stressed because it is firmly believed that the answer to the funding issue might vary if the warning system was limited to a single type of threat. As we move into the implementation of IEMS, the matter of warning systems requires careful rethinking in many American communities.

The specifics of a flood warning system are not identical to those associated with a tornado or a train car derailment involving a toxic chemical. Conceptually, however, the same functions must be performed. Unfortunately, all too often they are not performed with optimal effectiveness. However, reflecting on specific and localized hazard agents such as hurricanes and tornadoes, nationally we have made great strides.

It is time to recast the issue of integrated community warning systems and approach the matter within this broader multi-use perspective--especially within the dimensions of funding. It should be noted that we do strengthen the nation's capability to confront a variety of potential disasters if improvements are made in local community warning systems. So too, a broader constituent base might be developed for emergency management generally if this view is taken. As with a national disaster-loss data base, this need has its Federal dimension and therefore Federal dollars ought to be forthcoming.

4. Liability For Evacuation Or Not

As mentioned earlier, Margerun (1979) and other studies have raised a variety of legal issues. Some of the legal issues are quite complex and will be redefined through court decisions in the years ahead. However, given the range of

issues that have been raised, it is proposed that legal experts be provided a forum for the purpose of briefing State and local officials on the current legal environment. This might best be done by selecting a narrow topic, like evacuation, as a focal point, although related issues could also be introduced.

Among the policy issues that should be raised for future discussion are legislative needs at the State and local level(s). Among the key questions for addressing State and local needs in this regard are: (1) What strategies might best be applied to meet various needs? (2) Which strategies are more suitable for professional associations to pursue, as for example, the NCCEM?

5. Good Samaritan Legislation

This is another component of the legal issues problem confronting today's emergency managers. This problem was initially encountered during field work focusing on the study of search and rescue responses, Drabek et al. (1981).

As documented in numerous research studies undertaken during the past two decades, a large percentage of the emergency response functions during and after community disasters are completed in toto, or in part, by volunteers. While some of these volunteers are enacting organizational roles--be it a SAR team, the Red Cross, and so forth--many are not!

That this diversification, e.g. heterogeneous mix of responders, existed came as no surprise. What was surprising were concerns raised by many helpers--persons who had risked their own lives in some cases--relative to whether they could be sued.

Many states have enacted various types of "Good Samaritan" Laws. What remains uncertain is whether constituents within these states have a clear understanding of who is protected by these laws. On the other hand, what can be stated with some degree of certainty is that many people who have acted heroically in the past now report worry.

It would be a terrible tragedy if the legal environment were to erode the effectiveness of volunteer responders following disasters that so characterizes a core value of our nation. We have witnessed some of the negative outcomes of such approaches--especially those involving criminal acts. What comes to

mind immediately is a story of a woman being assaulted while people boarding a subway just passed on by. It must not be allowed to happen with disaster responses!

Here again is a fairly specific and rather narrow issue. It is at the cutting edge of our present-day "time window." According to a recent article in the Emergency Preparedness News (1983), one set of corrective actions are in motion. To quote:

The Hazardous Materials Advisory Council has assumed the leadership of a coalition of transport groups to encourage the passage of good samaritan laws throughout the country. State good samaritan laws are widely considered by the hazardous materials transportation and chemical industries to be essential for removing legal barriers to otherwise available and timely emergency responses to hazardous material accidents.

Industry efforts to get State legislators to pass these laws began with a need to develop emergency responses to incidents involving compressed gases in 1978. The National LP-Gas Association introduced model good samaritan legislation in the New Jersey State Legislature in 1978. Virginia was the first state to actually pass a bill covering compressed gases in 1979. Since then, six states have passed compressed gas good samaritan laws, six have laws covering all hazardous materials, and 16 states are considering legislation.

The February 1978 derailment of several propane tank cars in Waverly, Tennessee underscored the need for good samaritan legislation. According to LPGA Vice President Dan Myers:

"Emergency officials were unable to get any company to respond, because of liability problems, until Friday. Meanwhile, the temperature had risen to over 50 degrees. The combination of stresses on the derailed tank cars and the higher temperature resulted in an explosion. The theory is that if someone had responded within 24 hours of the accident while the temperature was still low, conditions would have been right for safely off-loading the product. Lives would have been saved."

6. Mental Health Needs Of First Responders

This issue is at the extreme end of the time window. It is not yet known whether it will ever become an issue because of uncertainties surrounding the need for its consideration. However, Drabek (1981), provides convincing evidence that for a limited set of extreme disasters there are problems that merit our attention. When first responders are confronted with such events as the 1978 San Diego plane crash or the collapse of the walkway at the Hyatt Regency in Kansas City, some helpers may be unduly traumatized.

Digging through debris and finding bits of human remains are but a few examples of extreme events. If the mangled bodies are those of children the stress may be exacerbated. Presently, we need better documentation from the research community on the mental health needs of first responders. The newly initiated Center for Mental Health Studies of Emergencies with the National Institute of Mental Health should accomplish this within the next few years. If research findings are supportive of expected results, then will come the issue of intervention. Based on the exceedingly limited data base available today, it could be postulated that some first responders have been hurt by the stress of the aforementioned traumatic events. Interventions are unsystematic at best--totally lacking at worst. This may emerge as a critical policy matter within the next few years.

7. Post-Event Mitigation Efforts

What types of mitigation efforts should be mandated following certain types of disasters? While the posture of local governments is not known, a few years ago the post-event mitigation audit effort was introduced by FEMA following various Presidential declarations. A policy conference focusing on an assessment of present procedures and possible recommendations for more extensive mitigative requirements--especially for smaller, more localized events--could provide the momentum for further study in this area.

To reiterate a point made earlier--concerning the obsolescence of present-day approaches to flood mitigation and the range of stake holders--this is not a simple engineering problem! The costs to local communities--both real and perceived--may not match those of a so-called mitigation expert from FEMA, the Corps of Engineers, or elsewhere.

8. Nuclear War As A Planning Problem

Within the context of this paper, this topic is perceived as a specialized aspect of hazard perceptions.

This issue is of immediate importance and should not be thought of as a technical planning problem. Rather, the issue is one of public perceptions, and must be recognized as such. Within this conceptual framework, FEMA's decision to intensify efforts regarding "crisis relocation planning," may or may not have been the best course of action at the time. But that decision illustrates some of the problems associated with public perceptions of hazards whether they be real or imagined.

There is an interdependency. Yet, local programs must not be allowed to be butchered because they have become identified as instruments of war. Maybe a bit extreme, but in the opinion of the author, this same message is implied in the following excerpt from the NEMA Spring Conference held in 1983:

"We, as a nation, have become more sensitive to the need to exert every effort to avoid the horrors of war. As a result, many of the programs designed to respond to that eventually come under close scrutiny and have become the subject of much discussion. If that is appropriate, and even desirable, the present debate has had an unnecessary adverse impact on all the programs on which State and local governments depend for all resources needed to protect the lives and property of their people.

To provide for the level of service requires sufficient funding to insure the proper blend of personnel and resources to adequately mitigate the effects of a catastrophe. Additional funds, significantly above current levels, are needed if viable comprehensive emergency management is to be a reality in every community in the nation.

State and local government financial resources are limited. A host of competing demands for available funds severely restrict the ability of State and local governments to satisfy emergency management requirements. We must look to the Federal Government for assistance."

9. From Flood To All-Hazard Insurance

In the 1972 Report to Congress--a rather different time window--the concept of all-hazard insurance was recommended. Now, more than a decade later, we can be pleased with the progress that has been made through one program within this single adjustment option. The National Flood Insurance Program (NFIP) was implemented, and much progress has been made toward increasing its visibility.

According to statistics appearing in the most recent issue News and Views (1983) -- the newsletter published by the Association of State Floodplain Managers, Incorporated--nearly two million policy-holders in more than 17,000 participating communities have been sold on the idea. That is progress.

It also is the good news. Unfortunately, there is more. In the same issue we learn that problems, as quoted below, remain.

"Reductions in the State Assistance Program will probably result in a loss of 40 or more professionals from State government who are working with local officials."

Obviously the NFIP is not a panacea. It is an important experiment that to date appears to be going well. But the task is not over, it really has just begun--even regarding the implementation of the basic protection originally envisioned.

Now the time is here to go the next step. The concept of all-hazard insurance could do much to expand our adjustment options. Years ago, angry hurricane victims were encountered who had been told that their homes were damaged by water, not wind. Thus despite their expectations, their home-owner policies were deemed inapplicable. Today, we read of mud-slide victims who wonder what protection might have been available. Whether it be caused by an earthquake, or an explosion resulting from an accidental train derailment, damage to one's home is damage.

Alternative models and approaches to insurance offerings is a desired step. Those electing to take certain risks should be expected to share the costs when tragedy strikes.

CONCLUSION

I have now made my five points. Remember? I began with a plea regarding assumptions and a reminder about selective perceptions. Along the way I sprinkled in three others so as to get us to my own list of candidate issues. By way of summary, the five points are as follows:

1. We all have a range of biases that structure what we perceive about reality and those aspects of reality that we define as good.
2. Any serious examination of emergency management has to be placed within the context of national trends.
3. Policy issues are viewed differently by an array of constituent parties -- the stockholders in emergency management. The pluralism of American society must be reflected in our analysis of policy issues and evaluation of potential solutions.
4. Disaster phases provide a temporal framework for classifying policy issues related to emergency management.
5. Nine candidate issues--varying in level of abstraction and time horizon--illustrate this temporally-based framework.

I hope that your mind is now racing--that your own list of policy issues is starting to take form. Bear in mind that we have not been discussing a static process, so you should be finishing this monograph armed with more ideas than answers.

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